ATTACHMENT A Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

- 1. (Original) A method of producing a microfluidic device comprising (a) providing a body comprising fusible material; and (b) selectively applying energy so that a portion of the fusible material melts, thereby creating one or more microchannels in the body.
- 2. (Original) A microfluidic method comprising (i) producing a microfluidic device by the method of claim 1; and (ii) passing an analyte material into a said microchannel.
- 3. (Original) A method according to claim 2 in which energy is also selectively applied during step (ii) to maintain and/or to alter the microchannel(s).
- 4. (Currently Amended) A method according to any preceding claim 1 wherein said body comprises a casing of material that is not fusible is use, and fusible material within said casing.
- 5. (Currently Amended) A method according to any preceding claim 1 wherein there are electrodes projecting into the body.
- 6. (Currently Amended) A method according to any preceding claim 1 wherein said selective application of energy is effected by the application of a beam of radiation or particles and/or by the application of a voltage.
- 7. (Currently Amended) A method according to any preceding claim 1 wherein the fusible material is ice, optionally containing a dissolved electrolyte.
- 8. (Currently Amended) A method according to any preceding claim 1 wherein the body contains one or more cavities, optionally produced by said selective application of

energy, communicating with one or more of said microchannels to function as reservoirs.

- 9. (Currently Amended) A method according to any preceding claim 1 wherein the device is provided with one or more detection windows and/or detection devices.
- 10. (Currently Amended) A method according to any preceding claim 1 wherein the device includes means for use in said selective application of energy.